

Appendix

Comments Received on the Bad River Tribe's Proposed Water Quality Standards



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 WEST JACKSON BOULEVARD

CHICAGO, IL 60604-3590

MAR 28 2011

REPLY TO THE ATTENTION OF: WQ-16J

**Naomi Tillison
Bad River Natural Resources Department
P.O. Box 39
Odanah, Wisconsin 54861**

Dear Ms. Tillison:

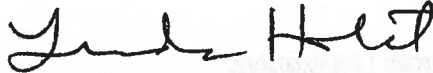
The U.S. Environmental Protection Agency applauds the Bad River Band on its ongoing work to develop water quality standards for use in management of the Tribe's surface water resources under the Clean Water Act (CWA). We appreciate the Tribe's considerable effort in preparing these water quality standards for public notice and comment and the significance of reaching this important milestone in the process of enacting tribal water quality standards.

In addition, we would like to thank the Tribe for the opportunity to provide comments on its draft standards. As you are aware, the EPA must review and approve the Tribe's water quality standards before they can be used for CWA purposes. In reviewing the Tribe's proposed standards, EPA considered whether the water quality standards proposed by the Tribe were consistent with the CWA, federal regulations on water quality standards at 40 CFR Part 131, and the Great Lakes Water Quality Guidance at 40 CFR Part 132. Within the Great Lakes basin, tribal and state water quality standards must be consistent with each of these for EPA to approve them. EPA performed a detailed review of the Tribe's proposed water quality standards for the purpose of identifying any provisions that might be vulnerable to challenge as being inconsistent with the applicable federal requirements or might be interpreted in a way that is inconsistent with the applicable federal requirements. The results of EPA's review are provided in the enclosure to this letter. We hope these comments are useful to the Tribe in adopting final water quality standards that protect the Tribe's waters in a manner consistent with the Tribe's intent and the applicable federal requirements.

We look forward to a continued discussion with the Tribe as you address questions raised during the public review process and move to finalize your standards. The comments in the enclosure to this letter reflect EPA's preliminary review only and do not constitute final EPA action to the

Tribe's water quality standards under section 303(c) of the CWA. Please continue to work closely with us as you prepare the Tribe's water quality standards for EPA review and approval. If you have any questions on our comments, please contact me at (312) 886-6758, or via e-mail at holst.linda@epa.gov. Alternatively, you may contact Robie Anson of my staff at (312) 886-1502, or via e-mail at anson.robie@epa.gov.

Sincerely,



Linda Holst, Chief
Water Quality Branch

Enclosure

Enclosure

I. Provisions of the Draft Bad River Water Quality Standards That May be Subject to Interpretation in a Manner that is Inconsistent With the Clean Water Act and Federal Regulations

Section C, Applicability, administration and amendment. 4.ii.

This provision states that modification of the Tribe's WQS, "shall be subject to public participation, consistent with the requirements of 40 CFR Part 25." The Federal regulations at 40 CFR Part 131.20 describe the Federal requirements for review and revision of water quality standards and include additional requirements governing public participation at 40 CFR 131.20(b). Because the Tribe's proposed water quality standards do not reference the requirements of 40 CFR 131.20, the Tribe's intent with respect to these requirements is unclear, creating an opportunity for interpretation of the Tribe's water quality standards in a manner that conflicts with the Federal regulations. This could be addressed by adding a reference to 40 CFR Part 131.20(b) in C.4.ii. of the Tribe's water quality standards, as well as the public participation requirements of 40 CFR Part 25. It also would be appropriate to reference other provisions of the Tribe's water quality standards that authorize revisions or site-specific modifications, specifically E.2.v. (changes to antidegradation classifications of waterbodies), E.7.v. (modification of criteria), and H (the portion of the first paragraph dealing with new or revised criteria) to ensure that these modifications and revisions are adopted in a manner consistent with the procedural requirements of C.4.ii.

Section H, Numeric water quality criteria.

In section H, the Tribe's water quality standards state: "Except where more protective criteria are specified in these Tribal water quality standards, the Bad River Tribe adopts by reference all of the numeric criteria and methodologies from the Great Lakes Guidance, 40 CFR 132.6, and Great Lakes Guidance shall be used to calculate all criteria. If these criteria are deemed not appropriate, Clean Water Act 304(a) criteria may be used. For all other pollutants where the Great Lakes Guidance methodology is not applicable, or where more stringent criteria is determined to be necessary for protection of Tribal surface waters, the applicable criteria will be the more protective value of either the provisions of these Tribal water quality standards or the most recent EPA published criteria recommendations as required by the Clean Water Act 304(a) or criteria developed applying methodologies and procedures acceptable under 40 CFR 131. For all other pollutants where the Great Lakes Guidance methodology is not applicable, or where more stringent criteria is determined to be necessary for protection of Tribal surface waters, the applicable criteria will be the more protective value of either the provisions of these Tribal water quality standards or the most recent U.S. EPA published criteria recommendations as required by the Clean Water Act 304(a) or criteria developed applying methodologies and procedures acceptable under 40 CFR 131."

While EPA understands the desire of the Tribe to ensure that its water quality standards are sufficiently stringent to protect the Tribe's waters and members, without additional context clarifying how the Tribe intends for this provision to be implemented, this provision could generate a conflict with the CWA or Federal regulations because it does not describe the process that will be followed to revise the criteria specified in the tables in Section H. It is also not clear with whom the authority resides to deem a criterion inappropriate or how the public will be informed of new or revised criteria. This could lead to a conflict with section 303(c)(2) of the CWA and the Federal regulations at 40 CFR Part 131.20. If the process in Section C.4. requiring public participation, adoption and submittal to EPA (consistent with the comments provided on

that section above) is referenced as the mechanism to be used to revise criteria, then there will be no such conflict.

II. Provisions of the Draft Bad River Water Quality Standards That Are Unclear

Section C. Applicability, administration, and amendment.

C.6. This provision states: “All numeric chronic criteria contained in this section apply at all in-stream flow rates greater than or equal to the flow rate calculated as the minimum 7-consecutive day average flow with a recurrence frequency of once in ten years (7Q10); narrative criteria apply regardless of flow. Numeric acute criteria shall apply regardless of flow.” This provision appears to authorize mixing zones in the calculation of permit limits to comply with chronic water quality criteria, although the standards do not include an explicit mixing zone policy. Is it the Tribe’s intent to authorize consideration of mixing in the calculation of permit limits to implement numeric chronic water quality criteria in the Tribe’s water quality standards? If it is the Tribe’s intent to allow for consideration of mixing, EPA urges the Tribe to include a policy in the water quality standards describing when, where, and to what extent, dilution may be considered in deriving limits to implement the standards.

Section D. Definitions

As a general comment, it may be beneficial for the Tribe to adopt the definitions for terms contained in the CWA and Federal regulations by reference and only include definitions for terms that are unique to the Tribe’s water quality standards and that are not defined in the CWA or Federal regulations. This would simplify the definition section and ensure consistency of definitions of terms between the Tribe and the Federal program. As noted below, there are terms defined in the Tribe’s water quality standards that differ from the corresponding Federal definition of the same term. Where there are differences, we would like to confirm that the differences are intentional rather than inadvertent.

Terms used in the Tribe’s water quality standards that could be defined:

Cold Water Fishery, Cool Water Fishery. These terms are used in Section F. To the extent that the Tribe understands particular species or characteristics to be indicators of these communities, these could be included in the definition section. This would help ensure that future water resources staff apply the standards in a consistent manner.

Supportive communities. This term is used in E.6.ii.f., “... results in changes to naturally occurring biological communities and corresponding supportive communities shall be prohibited.” What is meant by this term?

Comments on specific definitions contained in Section D:

Adverse effect. The Tribe’s definition of this term does not include the underlined section of the definition for “adverse effect” included in 40 CFR 132.2. The federal definition at 132.2 states: “Adverse effect is any detrimental effect to organisms due to exposure to a substance. This includes effects which are or may become harmful or toxic to the normal functions of an organism, but does not include non-harmful effects such as a tissue discoloration alone or the induction of enzymes involved in the metabolism of the substance.” Is the omission of the underlined section intentional and, if it is, does it indicate that the Tribe considers effects of this type to be harmful? Criteria derived by EPA do not protect against this type of effect.

Human cancer value. The definition of the term “human cancer value” in the Federal regulations at 40 CFR 132.2 is: “the maximum ambient water concentration of a substance at which a lifetime of exposure from either: drinking the water, consuming fish from the water, and water-related recreation activities, or consuming fish from the water, and water-related recreational activities, will represent a plausible upper-bound risk of contracting cancer of one in 100,000 using the exposure assumptions specified in the Methodologies for the Development of Human Health Criteria and Values in appendix C of 40 CFR 132.” The Tribe’s definition of the term at D.21. omits the underlined phrase. It appears that this may have been a transcription error because the definition of human noncancer value at D.23. includes the underlined phrase and matches exactly the definition in the Federal regulations at 40 CFR 132.2. Regardless, as written, the definition does not complete the “either” clause, making the definition unclear.

Point source. The definition of the term “point source” in the Federal regulations is: “any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include agricultural stormwater discharges and return flows from irrigated agriculture.” The definition of the term in the Tribe’s water quality standards lacks the underlined sentence. Did the Tribe intend to omit that portion of the definition? To the extent that the omission is intentional, the Tribe should be aware that EPA does not have the authority under the CWA to regulate agricultural stormwater discharges and return flows from irrigated agriculture as point sources.

Pollutant. Federal regulations at 40 CFR Part 122.2 define “pollutant” as: “dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water.” The term “Pollution” is defined at 40 CFR Part 130.2 as: “the man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water.” In D.30. the Tribe defines “pollutant” using the definition of “pollution” set by the CWA. Is this intentional?

Section E. General Considerations

Antidegradation Policy, Provision E.2.ii. This provision states: “Existing ambient water quality on Outstanding Resource Waters may not be lowered.” Later, the provision states: “Where the quality of the water exceeds that necessary to support the designated use, that quality shall be maintained and protected, or improved, unless the Tribe finds, after full satisfaction of inter-governmental coordination and public participation provisions of the Tribe’s continuing planning process that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located.” The Tribe’s intent with these two statements is unclear to EPA. Is it that new or increased discharges are permissible but only if the resulting water quality does not change from background?

Antidegradation Policy, Provision E.2.v. The Tribe’s water quality standards indicate that a Use Attainability Analysis (UAA) will be performed prior to moving a water body from a more protective antidegradation classification to a less protective antidegradation classification. EPA’s regulations do not treat assignment of a water to an antidegradation tier as a designated use subject to a UAA, nor would we expect a UAA if waters are moved from a higher antidegradation tier to a lower antidegradation tier. The Tribe may, at its discretion, choose to use EPA’s UAA tool for purposes of making such decisions, however the Tribe is not required by the Federal regulations or the CWA to do so. If the Tribe chooses to require UAAs for this purpose, the water quality standards should include a citation to EPA’s UAA regulations (40 CFR 131.10).

Antidegradation Implementation, Provisions E.3.ii.a through E.3.ii.c. The Tribe's water quality standards define a lowering of water quality as: "the projected or observed diminished chemical or biological integrity of Reservation surface waters, including changes to water flow or water level; or, new or increased loading of any pollutant from any regulated existing or new facility, either point source or nonpoint source, for which there is a control document or reviewable action." This definition does not include consideration of physical integrity, which might be affected by activities such as dredge and fill.

Antidegradation Implementation, Provisions E.3.ii.b. and E.3.ii.c. These provisions state that only Tribal actions to undertake the identified management activities are allowed. Would non-Tribal entities be allowed to restore resource habitat or respond to an emergency, or would this section preclude such activities?

Antidegradation Demonstration, Provision E.4.i. The Tribe notes that antidegradation demonstration materials should be submitted to the Water Resources Program but does not specify to whom materials should be addressed. To avoid confusion, EPA recommends that the Tribe identify to whom within the Water Resources Program materials should be submitted and by whom a decision will be made.

Antidegradation Demonstration, Provision E.4.ii.b. The Tribe's antidegradation implementation procedures require that an antidegradation demonstration for an ERW "identify alternative or enhanced treatment techniques that are available to the entity that would eliminate the lowering of water quality and their costs relative to the cost of treatment necessary to achieve applicable effluent limitations." Would the Tribe also like demonstrations to include options that would reduce or substantially reduce the lowering of water quality?

Narrative Criteria, Provision E.6.ii.b. The Tribe's water quality standards state that "concentrations of radioactive materials shall not exceed concentrations caused by naturally occurring materials." Does the Tribe mean "levels of radioactivity shall not exceed those found in Tribal waters under natural background conditions," or "...levels of radioactivity shall not exceed levels expected in Tribal waters under natural background conditions?"

Narrative Criteria, Provision, E.6.ii.e. The Tribe's water quality standards state: "Pollutants or human-induced changes to waters, the sediments of waters, or area hydrology that alter natural ambient conditions in waters such as, without limitation, flow, level, stage, dissolved oxygen, pH, and temperature shall be prohibited." This statement appears to forbid any human impact to Tribal waters that alters "natural ambient conditions." Is it the Tribe's intent to limit this prohibition to changes in flow, level stage, dissolved oxygen, pH, and temperature? Many common discharges, such as effluent from municipal wastewater treatment plants, have some small, localized impact on dissolved oxygen, pH, and temperature.

General Narrative Criteria, E.6.ii.h. The Tribe's water quality standards state: "No increase or decrease in temperature shall be allowed from other than natural causes." As stated in the previous comment, many common discharges, such as effluent from municipal wastewater treatment plants and stormwater from parking lots during the summer, have some small, localized impacts on temperature. Is it the Tribe's intent to prohibit such discharges?

Specific Numeric Criteria, E.7.v. The Tribe's water quality standards state: "...modifications to water quality criteria shall assure that all designated and existing uses are protected and that water quality standards continue to be attained." EPA defines water quality standards as designated uses, criteria, and antidegradation. EPA believes that the term "water quality standards" in this provision of the Tribe's water quality standards means that the designated uses, the modified

criteria, and the antidegradation policy continue to be attained. Is this consistent with the Tribe's intent?

Section H, Numeric Water Quality Criteria

H.4. The Tribe's water quality standards state: "The human health cancer criteria for nondrinking water (HCV-nondrinking), and human health noncancer criteria for nondrinking water (HNV-nondrinking) from Tables 6 and 7 shall apply to all waters with a Cultural (C1) and/or Recreational (R) designated use." Does the Tribe mean "the human health cancer criteria for nondrinking water (HCV-nondrinking), and human health noncancer criteria for nondrinking water (HNV-nondrinking) from Tables 6 and 7 shall apply to all waters *without* a Cultural (C1) and/or Recreational (R) designated use?"

H.4. The Tribe's water quality standards state: "the criteria in Tables 6 and 7 are roughly based on EPA's recommended subsistence fish consumption rate of 142.4 g/day." Providing the actual fish consumption level used in these calculations is preferable to describing the criteria as roughly based on a fish consumption rate of 142.4 g/day.

III. Provisions of the Draft Bad River Water Quality Standards That Require Minor Changes

Section H, Numeric Water Quality Criteria

In footnote "d" to Table 2, "CDM" should be "CMC".

In footnote "c" to Table 3, the equation should read " $CMC_t = \exp m_A([pH] + b_A)$ ".

In Table 4, the CCC value for chromium (VI) should be subject to footnotes "a" and "b".

In footnote "b" to Table 4, the statement "the CCCd shall be rounded to two significant digits" should be included.

Footnote "d" to Table 4 should read " $CCC = CCC_t$ ".

In the notes to Table 4, the sentence "CCC^d is the CCC expressed as a total concentration" should read "CCC^d is the CCC expressed"

In Table 5, cadmium, chromium (III), copper, nickel, and zinc should be denoted as subject to footnotes "a" and "b". Pentachlorophenol should be subject to footnote "c".

In footnote "a" to Table 5, the equation should be modified to read " $CCC_{tr} = \exp\{m_C[\ln(\text{hardness})] + b_C\}$ ".

In footnote "c" to Table 5, the equation should be modified to read " $CMC_t = \exp\{m_A[pH] + b_A\}$." In addition, the next sentence should read "the CMCt shall be rounded to two significant digits."

In Table 8, please note that the mercury criterion includes methylmercury.

Naomi Tillison

From: Larson, Nancy J - DNR [NancyJ.Larson@wisconsin.gov]
Sent: Monday, March 28, 2011 4:14 PM
To: Naomi Tillison
Cc: Gozdziwski, John F - DNR; Jerow, Thomas S - DNR
Subject: DNR technical comments on the Bad River Water Quality Standards
Attachments: DNR Technical Comments on March 28, 2011 proposal.doc

Hi Naomi:

As we discussed on the phone last week, here are the technical comments resulting from the DNR staff review of the Bad River Band's proposed water quality standards. Thank you for the opportunity to review and comment. Good luck with the rest of your process. Take care,

--Nancy

 **Nancy J. Larson**

Lake Superior Basin Water Team Leader
Wisconsin Department of Natural Resources
1701 N 4th Street
Superior, WI 54880

(☎) phone: (715) 395-6911

(☎) fax: (715) 392-7993

(✉) e-mail: nancyj.larson@wisconsin.gov

DNR Technical Comments on February 9, 2011 proposed Bad River Band Water Quality Standards
March 28, 2011

The following are the current permitted wastewater dischargers upstream of the reservation in the Bad River Watershed:

To the Bad River: City of Mellen, Columbia Forest Products, DNR Copper Falls
To Vaughn Creek – Saxon Sanitary District (fill and draw – spring and fall)
To Alder Creek – Town of Knight Sanitary District and Whitecap Mountain Sanitary District (fill and draw – spring and fall)
To Bibon Swamp (White River) (overland flow to Bibon Swamp) Grand View Sanitary District – continuous.

We understand that with finalization of the Bad River Band water quality standards, effluent limits of dischargers upstream of the reservation could be influenced by standards applicable on the reservation.

p. 6

D. Definitions:

34. “Reservation” We think the definition would be clarified by reference to a legal land description or as in the previous draft, by referencing the external reservation boundary as established in the Treaty of 1854. We think this could help clarify issues of where the tribal vs the state water quality standards would apply.

p. 8

E. General Considerations

3. Antidegradation Implementation: It is not clear to us how the provisions addressing “water flow or water level” would be administered through water quality standards.

p. 15

6. Narrative Criteria

6 ii. General narrative criteria

6 ii. H. Temperature current language “No increase or decrease in temperature shall be allowed from other than natural causes.” Our suggestion is to change to “no measurable increase in temperature”etc.

We reviewed the toxic criteria and found that they were consistent with EPA’s Great Lakes Initiative. The ammonia criteria based on mussels, although different from the state’s criteria, is consistent with EPA’s draft criteria.

We also evaluated the criteria for bioaccumulative chemicals of concern (BCCs). The criteria for nearly all of the pollutants are as restrictive, or more restrictive than the criteria in NR 105 Wis. Admin. Code. We note that the same EPA calculation procedures are used for the proposed tribal standards as the state standards. The tribal

standards follow an EPA recommendation for subsistence fish consumption at a rate of 142.2 g / day.

NR 105 includes several BCC substances that are not listed in the proposed Bad River WQS, specifically - Alpha BHC, BHC tech. grade, Hexachlorobutadiene, Pentachlorobenzene and 1,2,4,5-Tetrachlorobenzene. The human health and human cancer criteria listed in NR 105 also have numerous non-BCC substances that are not included with the Bad River WQS.

We also checked to see how the Cold Water Fishery (F1) water bodies listed in the proposed Bad River WQS are classified by the state. All of the F1 listed waters had segments that the state lists as Class 1, 2 and/or 3 trout waters. The White River is listed as F2 (cool water) in the proposed Bad River standards and listed by the state as Class 2 trout water. A comparison of the F1 waters and the state trout water listings show a fairly close correlation but not perfect agreement.

We noted that many of the technical comments we provided on the August 2010 draft were addressed in the February 9, 2011 draft.

Thank you for the opportunity to provide these comments.

GREAT LAKES INDIAN FISH AND WILDLIFE COMMISSION

P. O. Box 9 • Odanah, WI 54861 • 715/682-6619 • FAX 715/682-9294

• MEMBER TRIBES •

MICHIGAN

Bay Mills Community
Keweenaw Bay Community
Lac Vieux Desert Band

WISCONSIN

Bad River Band
Lac Courte Oreilles Band
Lac du Flambeau Band

Red Cliff Band
St. Croix Chippewa
Sokaogon Chippewa

MINNESOTA

Fond du Lac Band
Mille Lacs Band



March 28, 2011

Naomi Tillison
Bad River Natural Resources Department
P.O. Box 39
Odanah, WI 54861

Re: Bad River Band of Lake Superior Chippewa Indians' Proposed Water Quality Standards

Dear Ms. Tillison,

The Voigt Intertribal Task Force (Task Force) of the Great Lakes Indian Fish and Wildlife Commission (GLIFWC) hereby expresses its support for the Bad River Band's (Band's) proposed Water Quality Standards.

The establishment of the Band's water quality standards will ensure that water pollution is limited in the area around, especially upstream of, the tribe's reservation. This is a benefit to the nine member tribes of the Voigt Intertribal Task Force because they have reserved hunting, fishing and gathering rights on lands including those that surround the Bad River Band's reservation. These treaty guaranteed activities support a tribal lifeway that depends on clean and healthy natural resources for cultural, subsistence and economic purposes. The Band's water quality standards will help ensure that those resources are protected from substances that could degrade water quality.

Thank you for the opportunity to submit these comments.

Sincerely,

A handwritten signature in black ink, appearing to read "James E. Zorn".

James E. Zorn
Executive Administrator

cc: Voigt Intertribal Task Force
GLIFWC Division Heads



**Fond du Lac
Environmental
Program**

Naomi Tillison
Bad River Natural Resources Department
P.O. Box 39
Odanah, WI 54861

Re: Bad River Band of Lake Superior Chippewa Indians Proposed Water Quality Standards

Dear Ms. Tillison:

As Water Projects Coordinator for the Fond du Lac Band of Lake Superior Chippewa, I would like to offer my comments in support of your proposed water quality standards. From the opening background section, you have provided a clear and compelling rationale for the tribe's decision to pursue a federally-approved water quality standards approach for protecting the waters of the reservation. The use of Ojibwemowin throughout the introduction and in the definitions provides a unique cultural context for conveying the significance of this endeavor.

I appreciate the distinctions you make in your definitions section, between 'ambient conditions' and 'background conditions'. I have found that it is important to discern between the conditions we can measure at a specific point in time, and those conditions that a waterbody would exhibit, regardless of anthropogenic influences. You have also defined "exceptional resource water", "outstanding resource water" and "outstanding tribal resource water" in a manner that links the tribe's usage and significance to the most protective policies and approaches for implementation under the Clean Water Act.

Your "General narrative criteria" section is very strong. In addition to the discussion of sulfate levels in wild rice waters (subsection "c"), your inclusion of 'natural hydrologic conditions supportive of the natural biological community' (subsection "d") and 'migration of fish and other aquatic biota normally present shall not be hindered' (subsection "f") are all significant in their intention to protect reservation waters from known human impacts.

I believe your proposed water quality standards are an important step in the Bad River Band's efforts to protect culturally significant aquatic resources of the reservation. Please include this letter of support in your responsiveness summary to the USEPA Region 5 Water Division as they make their determination to approve your standards.

Sincerely,

Nancy Schudt
Nancy Schudt



PO Box 875
Ashland, WI 54806

Phone: 715-682-2003
Email: brwa_wi@yahoo.com
www.badriverwatershed.org

Naomi Tillison
Bad River Natural Resources Department
P.O. Box 39
Odanah, WI 54861

March 28, 2011

Dear Naomi,

The Bad River Watershed Association (BRWA) appreciates the opportunity to provide comments on the draft Water Quality Standards of the Bad River Band of the Lake Superior Tribe of Chippewa Indians (Bad River). As you know, BRWA is a 501c(3) non-profit organization whose mission is to promote a healthy relationship between the people and the natural communities of the Bad River Watershed by involving all citizens in assessing, maintaining, and improving watershed integrity for future generations.

BRWA staff has taken time to review the draft Water Quality Standards being proposed by Bad River. Enclosed you will find the draft Water Quality Standards document with areas highlighted and comments provided. These comments are intended to strengthen the standards, identify areas where we felt clarification was needed, and offer other suggestions based on our knowledge of Bad River Watershed streams that originate outside of the Reservation boundary.

Overall, BRWA believes these standards will help maintain and improve the integrity of the Bad River Watershed for future generations and we fully support them.

Please contact Matt Hudson (715-682-2661) if you have questions about any of the comments. We look forward to continuing to work with Bad River and with you to keep the Bad River Watershed great!

Sincerely,

Michele Wheeler
Executive Director
Bad River Watershed Association

enc: Bad River WQS Proposed - BRWA Comments


Criteria and Values in appendix C of 40 CFR 132.

24. "Natural Background Conditions" are the expected conditions that exist in the absence of any impact from point or non-point source pollutants attributable to human activity or from physical alteration of wetlands.
25. "Natural Biological Community" means the characteristic/expected biological community for a water body absent human-induced impacts to water bodies including wetlands.
26. "Non-point Source" means any source of pollution or substance to water quality that is not a point source.
27. "Outstanding Resource Water" (Chi minosibii or "large good river") is a classification for those waters so designated in the antidegradation policy that are considered to be of high quality and culturally important for the fisheries and ecosystems they support. This classification is more stringent than EPA's Tier 2 classification and could be described as a Tier 2.5 water under the Agency's antidegradation policy.
28. "Outstanding Tribal Resource Water" (Chi minosingbii or "best waters") is a classification for those waters so designated in the antidegradation policy that are considered largely pristine and constitute a significantly important cultural and ecological resource. These waters are important for the cultivation of wild rice or the spawning of lake sturgeon, or have other special resource values. This classification is roughly equivalent to EPA's Tier 3 classification under its antidegradation policy, though this classification may be more protective than the Agency's policy.
29. "Point Source" means any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged.
30. "Pollutant" means a man-made or man-induced alteration of the chemical, physical, biological and radiological integrity of water.
31. "pH" is the negative logarithm of the effective hydrogen ion concentration in gram equivalents per liter; a measure of the acidity or alkalinity of a solution, increasing with increasing alkalinity and decreasing with increasing acidity.
32. "Primary contact recreation" is an activity where a person would have direct contact with water to the point of complete submergence, including but not limited to skin diving, swimming, and water skiing.
33. "Regional Administrator" is the Administrator of EPA's Region V.
34. "Reservation" is the Bad River Reservation, described as follows: Beginning on the south shore of Lake Superior, a few miles west of Montreal River, at the mouth of a creek called by the Indians Ke-Che-se-be-we-she, running thence south to a line drawn east and west through the centre of township forty-seven north, thence west to the west line of said township, thence south to the southeast corner of the township forty-six north, range thirty-two west, thence west the width of two townships, thence north the width of two

Summary of Comments on _

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 Number: 1 Author: BRWA Subject: Highlight Date: 3/28/2011 9:46:39 AM

 Number: 2 Author: BRWA Subject: Sticky Note Date: 3/28/2011 9:46:37 AM
physical alteration by humans? Not clear whether this alteration would apply to a "natural" physical alteration.

maintenance and protection of water quality to ensure that all designated and existing uses are met and maintained.

- i. For the purposes of implementing the provisions of this subsection, any surface waters not specifically classified as Outstanding Tribal Resource Waters (Chi minosingbii) or Outstanding Resource Waters (Chi minosibii) are classified as Exceptional Resource Waters (Anishinaabosibiing) and are roughly equivalent to EPA's regulatory definition of Tier 2 waters under the Agency's antidegradation policy. Exceptional Resource Waters are of high quality and culturally important for the ecosystems they support. Existing in-stream water uses and the level of water quality fully protective of the existing uses shall be maintained and protected, or improved in the case of a degraded stream. Where designated uses of the water body are impaired, there shall be no lowering of the water quality with respect to the pollutant or pollutants that are causing the impairment. Where the quality of the water exceeds that necessary to support the designated use, that quality shall be maintained and protected, or improved, unless the Tribe finds, after full satisfaction of inter-governmental coordination and public participation provisions of the Tribe's continuing planning process that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located. In allowing such degradation or lower water quality, the Tribe shall assure water quality adequate to protect existing uses fully.
- ii. Surface waters of the Reservation that are identified as high quality and culturally important to the Tribe for the fisheries and ecosystems they support are Outstanding Resource Waters (Chi minosibii) and could be described as roughly equivalent to EPA's regulatory definition of Tier 2.5 waters under the Agency's antidegradation policy. Existing ambient water quality on Outstanding Resource Waters may not be lowered. New or increased discharges may be permitted provided that the new or increased discharge does not result in a change in background conditions or negatively impact designated uses or existing uses; however, no new or increased discharges of BCCs will be permitted. Where the quality of the water exceeds that necessary to support the designated use, that quality shall be maintained and protected, or improved, unless the Tribe finds, after full satisfaction of inter-governmental coordination and public participation provisions of the Tribe's continuing planning process that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located. In allowing such degradation or lower water quality, the Tribe shall assure water quality adequate to protect existing uses fully. Waters designated as Outstanding Resource Waters (Chi minosibii)

Number: 1 Author: BRWA Subject: Highlight Date: 3/28/2011 9:23:05 AM





Number: 2 Author: BRWA Subject: Sticky Note Date: 3/28/2011 9:29:30 AM

What if those existing conditions are degraded? Seems like what you are after is a water whose baseline conditions are meeting all designated uses.

- growth producing objectionable algal densities, nuisance aquatic vegetation, dominance of any nuisance species instream, or cause nuisance conditions in any other fashion; or
- g. Adversely affect the natural biological community of the waterbody.

ii. *General narrative criteria.* These criteria apply to all waters of the Reservation (including wetlands) except as otherwise noted.

- a. Pollutants shall not be present in concentrations that cause or may contribute to an adverse effect to human, plant, animal or aquatic life, or in quantities that may interfere with the normal propagation, growth and survival of indigenous aquatic biota. For toxic substances lacking published criteria, minimum criteria or values shall be calculated by the Tribe or U.S. EPA consistent with procedures specified at 40 CFR 132 Appendices A, B, C and D.
- b. Concentrations of radioactive materials shall not exceed concentrations caused by naturally occurring materials.
- c. Water quantity and quality that may limit the growth and propagation of, or otherwise cause or contribute to an adverse effect to wild rice, wildlife, and other flora and fauna of cultural importance to the Tribe shall be prohibited. This includes, but is not limited to, a requirement that sulfate levels shall not exceed concentrations causing or contributing to any adverse effects in waters, including those with a Wild Rice designated use.
- d. Natural hydrological conditions supportive of the natural biological community, including all flora and fauna, and physical characteristics naturally present in the waterbody shall be protected to prevent any adverse effects.
- e. Pollutants or human-induced changes to waters, the sediments of waters, or area hydrology that alter natural ambient conditions in waters such as, without limitation, flow, level, stage, dissolved oxygen, pH, and temperature shall be prohibited. Natural daily and seasonal fluctuations of flow (including naturally occurring seiche), level, stage, dissolved oxygen, pH, and temperature shall be maintained.
- f. Pollutants or human-induced changes to waters, the sediments of waters, or area hydrology that results in changes to naturally occurring biological communities and corresponding supportive communities shall be prohibited. The migration of fish and other aquatic biota normally present shall not be hindered.
- g. Existing mineral quality shall not be altered by municipal, industrial and in-stream activities or other waste discharges so

	Number: 1	Author: BRWA	Subject: Highlight	Date: 3/28/2011 9:49:25 AM
"Natural hydrological conditions" not defined in definitions page.				
	Number: 2	Author: BRWA	Subject: Sticky Note	Date: 3/28/2011 9:52:45 AM
The word "natural" is used often to relate to different things but is only defined as part of "natural background conditions" and "natural biological community." The word "natural" or any time it is used as part of describing a certain condition should be defined.				
	Number: 3	Author: BRWA	Subject: Highlight	Date: 3/28/2011 9:49:54 AM
	Number: 4	Author: BRWA	Subject: Highlight	Date: 3/28/2011 9:53:51 AM
This term isn't defined anywhere I can see.				

- as to in any way impair the designated uses for a water body.
- h. Temperature – No increase or decrease in temperature shall be allowed from other than natural causes.
 - i. The presence of pollutants in quantities that result in bioaccumulation in aquatic organisms that may cause or contribute to an adverse effect to consumers of aquatic organisms shall be prohibited.
7. *Specific numeric criteria.* In addition to the other requirements of these Tribal water quality standards, the below Numeric Criteria apply to all waters of the Bad River Reservation. Failure to meet the below criteria constitutes an enforceable violation of these Tribal water quality standards, and no discharge that has the potential to create or support a violation of these Numeric Criteria shall be approved. These criteria apply to all waters (including wetlands), except as otherwise noted:
- i. Dissolved oxygen – Unless otherwise demonstrated through a use attainability analysis or site-specific criterion that aquatic life cannot be supported, a water body capable of supporting aquatic life shall have a daily minimum dissolved oxygen standard of 5 mg/L in all cases except waters designated as a Cold Water Fishery. For those waters designated as a Cold Water Fishery, the dissolved oxygen shall have a daily minimum of 6 mg/L at any time and 8 mg/L when and where early life stages of cold water fish occur. These criteria will not apply to the Kakagon Sloughs, Bad River Sloughs, and wetlands due to their natural conditions.
 - ii. pH – No change is permitted greater than 0.5 units over a period of 24 hours for other than natural causes. The change, upward or downward, shall not result in an adverse effect on aquatic biota, fish or wildlife.
 - iii. Turbidity – Shall not exceed 5 NTU over natural background turbidity when the background turbidity is 50 NTU or less. Turbidity shall not increase more than 10 percent when the background turbidity is more than 50 NTU.
 - iv. Bacteriological Water Quality Criteria - The geometric mean of not less than 5 samples equally spaced over a 30-day period shall not exceed 126 *E. coli* per 100 milliliters (mL) for fresh waters. Any single sample shall not exceed 235 *E. coli* per 100 mL.
 - v. Modification of Criteria - The Tribe may revise criteria on a site-specific basis as necessary to reflect new scientific data or conditions specific to a given site or water body. Such modifications to water quality criteria shall assure that all designated and existing uses are protected and that water quality standards continue to be attained. Revisions of site-specific criteria shall be consistent with those procedures found in EPA's "Water Quality Standards Handbook: Second Edition (EPA-823-B-94-005; August 1994 with some new information [June 2007] at Chapter 3), and 40 CFR 132, "Water

T Number: 1 Author: BRWA Subject: Highlight Date: 3/28/2011 9:56:27 AM
This should be defined.

T Number: 2 Author: BRWA Subject: Highlight Date: 3/28/2011 9:57:45 AM

E Number: 3 Author: BRWA Subject: Sticky Note Date: 3/28/2011 10:00:41 AM

Does this mean any one sample can't exceed background by 5 NTU? A group of samples? We know that turbidity in many BRW streams may increase during runoff events and then go back to more of a "baseline" condition during normal flow. Does the turbidity standard apply to all flow conditions or just baseline flow?







T Number: 4 Author: BRWA Subject: Highlight Date: 3/28/2011 10:01:54 AM
I usually see it defined as "colony forming units per 100 mL"

Quality Guidance for the Great Lakes System.” All modified criteria must be submitted to the Regional Administrator for approval. The Tribe shall adopt more stringent site-specific criteria where necessary to protect federal-listed threatened or endangered species consistent with 40 CFR 132 Appendix F, procedure 1. The Tribe may adopt more stringent site-specific criteria where necessary to protect state-listed threatened or endangered species consistent with 40 CFR 132 Appendix F, procedure 1. Such revisions shall be adopted using the procedure specified in 40 CFR 132 section 4.


8. *Analytical methods.* The analytical testing methods used to measure or otherwise evaluate compliance with water quality standards shall to the extent practicable, be in accordance with the most recent editions of the following:
 - i. “Guidelines Establishing Test Procedures for the Analysis of Pollutants” (40 CFR 136);
 - ii. “Standard Methods for the Examination of Water and Wastewater” (published by the American Public Health Association, American Water Works Association, and the Water Pollution Control Federation);
 - iii. Other or superseding methods published and/or approved by EPA.

F. *Designated uses.* The Tribe does not designate a public water supply use because the surface waters of the Reservation are currently not utilized as a drinking water supply. Where there are several designated uses for a waterbody, the applicable standard applied will be the criterion necessary to protect the most sensitive use. ² the boundary between surface waters of different designated uses, the water quality criteria necessary to protect the more sensitive use or uses shall apply. The following designated uses shall apply to the various classes of surface waters within the exterior boundaries of the Bad River Reservation:

1. *Cultural (C1).* Water-based activities essential to maintaining the Tribe’s cultural heritage, including but not limited to ceremony, subsistence fishing, hunting and harvesting. This use includes primary and secondary contact and ingestion.
2. *Wild Rice (W1).* Supports or has the potential to support wild rice habitat for sustainable growth and safe consumption.
3. *Wildlife (W2).* Supports the proper habitat for propagation of wildlife, which will allow the safe ingestion of any wildlife resources that provide a dietary food source for Tribal subsistence.
4. *Aquatic Life and Fish (A).* Supports conditions for a balanced aquatic community.
5. *Cold Water Fishery (F1).* Supports or has the potential to support the existence of cold water fishery communities ⁴ and ³ spawning areas. No thermal discharge to such waters will be allowed.
6. *Cool Water Fishery (F2).* Supports or has the potential to support the existence of cool water fishery communities ⁶ and ⁵ spawning areas for at least


	Number: 1	Author: BRWA	Subject: Sticky Note	Date: 3/28/2011 10:25:17 AM
	What is the most sensitive use of the ones that are listed?			
	Number: 2	Author: BRWA	Subject: Highlight	Date: 3/28/2011 10:24:50 AM
	Number: 3	Author: BRWA	Subject: Sticky Note	Date: 3/28/2011 10:25:43 AM
	Definition?			
	Number: 4	Author: BRWA	Subject: Highlight	Date: 3/28/2011 10:25:36 AM
	Number: 5	Author: BRWA	Subject: Sticky Note	Date: 3/28/2011 10:26:02 AM
	Definition?			
	Number: 6	Author: BRWA	Subject: Highlight	Date: 3/28/2011 10:25:47 AM

a portion of the year.

7. *Recreational (R)*. Supports primary contact recreation and secondary contact recreation. This includes Tribal activities including water contact such as boating, hunting, fishing and harvesting. This use includes primary and secondary contact and ingestion.
8. *Commercial (C2)*. Supports the use of water in propagation of fish fry for the Tribal Hatchery and/or irrigation of community agricultural projects.
9. *Navigation (N)*. The water quality is adequate for navigation in and on the water.
10. *Wetland (W3)*.  area that will be protected and maintained for at least some of the following uses: maintaining biological diversity, preserving wildlife habitat, providing recreational activities, erosion control, groundwater recharge, low flow augmentation, storm water retention, prevention of stream sedimentation, and the propagation of wild rice.

G. *Specific Classifications*. Specific classifications for surface waters of the Bad River Reservation are in Table 1:


TABLE 1: Specific designated uses of the Tribe's water resources.

WATERBODY	DESIGNATED USES APPLIED TO WATER BODIES						
	C1	W2	W1	A	R	F1	F2
Kakagon Slough	X	X	X	X	X		X
Sand Cut Slough	X	X	X	X	X		X
Bad River Slough	X	X	X	X	X		X
Honest John Lake	X	X		X	X		X
Wood Creek Slough	X	X	X	X	X		X
Bad River	X	X	X	X	X		X
Kakagon River	X	X	X	X	X		X
Brunsweller River	X	X		X	X		X
White River	X	X		X	X		X
Marengo River	X	X		X	X		X
Potato River	X	X		X	X	X	X

	C1	W2	W1	A	R	F1	F2
Wood Creek	X	X	X	X	X		X
Bear Trap Creek	X	X	X	X	X		X
Graveyard Creek	X	X		X	X	X	
Bell Creek	X	X		X	X	X	
Morrison Creek	X	X		X	X		X
Newago Creek	X	X		X	X		X
Denomie Creek	X	X		X	X		X
West Branch Denomie Creek	X	X		X	X		X
Rins Creek	X	X		X	X		X
Silver Creek	X	X		X	X		X
Thornapple Creek	X	X		X	X		X
Meadow Creek	X	X		X	X		X
Elm Creek	X	X		X	X		X
Vaughn Creek	X	X		X	X	X	X
Upper Vaughn Creek	X	X		X	X		X
Winks Creek	X	X		X	X	X	
Cameron Creek	X	X		X	X		X
Sugarbush Creek	X	X		X	X		X
² Billy Creek ¹	X	X		X	X	X	
Trout Brook	X	X		X	X	X	X
Tyler Forks	X	X		X	X	X	
Hanson Swamp	X	X		X	X		
Sugarbush Pond	X	X		X	X		
Alex Pond	X	X		X	X		

T

	C1	W2	W1	A	R	F1	F2
Wolf Pond	X	X		X	X		
Pictured Rock Lake	X	X		X	X		
Sugarbush Lake	X	X		X	X		
Lost Lake	X	X		X	X		
Moonshine Lake	X	X		X	X		
Bog Lake	X	X		X	X		

¹ The designated uses entitled Commercial (C2) and Navigation (N) apply to all waters. The designated use entitled Wetland (W3) applies to all wetlands. Waters not listed above will have the following designated uses: Cultural (C1), Wildlife (W2), Aquatic Life and Fish (A), Recreation (R), Commercial (C2), and Navigation (N). 

H. *Numeric water quality criteria.* Because of the Tribe's cultural, spiritual, economic, and thus political dependence and interdependence with the waters of the Bad River Reservation, the highest protection of these Tribal waters is essential to the protection of the health and safety of Tribal members, and for the survival and growth of the Tribe. Except where more protective criteria are specified in these Tribal water quality standards, the Bad River Tribe adopts by reference all of the numeric criteria and methodologies from the Great Lakes Guidance, 40 CFR 132.6, and Great Lakes Guidance shall be used to calculate all criteria. If these criteria are deemed not appropriate, Clean Water Act 304(a) criteria may be used. For all other pollutants where the Great Lakes Guidance methodology is not applicable, or where more stringent criteria is determined to be necessary for protection of Tribal surface waters, the applicable criteria will be the more protective value of either the provisions of these Tribal water quality standards or the most recent U.S. EPA published criteria recommendations as required by the Clean Water Act 304(a) or criteria developed applying methodologies and procedures acceptable under 40 CFR 131.

1. The acute water quality criteria for the protection of aquatic life in ambient water in Tables 2 and 3 shall apply to all waters with an Aquatic Life and Fish (A) designated use.

How are the first and last sentence different? Is there a need to have a column in the table for C1, W2, A, and R when they apply to all waters?

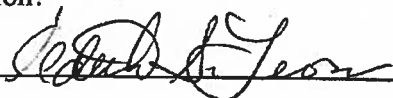
Oral Comments from M. Hudson

I'm Matt Hudson, I'm the Watershed Action Director for the Bad River Watershed Association, and we submitted written comments to Naomi today, but I thought I would just get up and say something, as well. First of all the Watershed Association is fully in support of the tribes WQS. We are a non-profit organization, Loretta mentioned us, during her words, and we've worked extensively with the tribe, especially through The Natural Resources Department over the years to collect WQ data, particularly from areas outside the reservation boundaries and we are really excited to be working with the tribe to maintain and improve the integrity of the Bad River Watershed, for future generations. So we really believe that these standards are an important step in that regard and we're really excited to support them. So, thank you.

Comment
On Proposed Water Quality Standards for the Bad River Band of Lake Superior Tribe of
Chippewa

Submitted by: Edith S. Leoso, Bad River Tribal member

I am in full support of establishing the proposed water quality standards for my reservation. For far too long our water quality standards have been decided upon and set, based on the values and beliefs of others without meaningful government-to-government consultation with the Bad River Tribe. For far too long our values as it pertains to the water that enriches our lives and the lives of our children - the Bad River Tribal membership - was ignored. Water is Sacred and clean water is precious to the existence of human life. However, within our reservation we can only do so much. We are at the final stopping place of the water before it flows into the lake. If we set our standards to ensure clean water, those in the uplands must ensure the quality of water flowing into our reservation is at *our standards*, before it reaches us; or all of this will be fruitless. Will we have adequate resources and the necessary collaborative relationships to enforce our water quality standards, and ensure our standards are met by others outside of our reservation?

Signed: 

Date: March 28, 2011



RICK SNYDER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
LANSING



DAN WYANT
DIRECTOR

March 28, 2011

VIA E-MAIL

Ms. Naomi Tillison
Bad River Natural Resources Department
P.O. Box 39
Odanah, Wisconsin 54861

Dear Ms. Tillison:

Thank you for the February 9, 2011, letter to Mr. Dan Wyant, Director, Michigan Department of Environmental Quality (MDEQ). Director Wyant has referred your letter to the Water Resources Division for response.

We appreciate the opportunity to review the water quality standards being proposed by the Bad River Band of Lake Superior Tribe of Chippewa Indians. The Water Resources Division reviewed the Tribe's proposed water quality standards, and while there are some differences compared to Michigan's water quality standards, we believe they are reasonable and defensible, and that implementation will not negatively affect water quality in Michigan. Therefore, we will not be providing any specific comments.

We applaud the Tribe's effort in developing water quality standards to protect resources we share such as Lake Superior, and wish you well in your rulemaking process. If the Tribe has any questions regarding Michigan's water quality standards, please feel free to contact Ms. Sylvia Heaton, Surface Water Assessment Section, at 517-373-1320; heatons@michigan.gov; or MDEQ, Water Resources Division, P.O. Box 30458, Lansing, Michigan 48909-7948.

Sincerely,

William Creal, Chief
Water Resources Division
517-335-4176

cc: Mr. Michael Wiggins, Jr., Bad River Band of
Lake Superior Tribe of Chippewa Indians
Mr. Dan Wyant, Director, MDEQ
Mr. Jim Sygo, Deputy Director, MDEQ
Mr. Michael Beaulac, Tribal Liaison, MDEQ
Ms. Sylvia Heaton, MDEQ

Oral Comments from L. Livingston

well I've read through the proposed WQS for Bad River. Well, my name is Loretta Livingston; I'm a Bad River Tribal Member, very much interested in this area. So I took the time to read the proposed WQS for Bad River, and I just have, well I have a number of questions. First I'd like to add that I'm very impressed with the proposed WQS, as they're presented, I read, impressed because, it kind of, it does a good job of providing the definitions and of the various elements involved in developing a WQS for Bad River, and there's a fairly decent explanation of the various elements that go into this whole process. But I do have some questions and more clarifications of some of the areas in these proposed standards. Um, I'll save my questions on the definitions for last, so I might back track before my comments are over. Um, but, I have a question on section, actually its page 8 of the proposed standards, under the heading general considerations, number 2.i. It talks about the anti-degradation policy, and this particular part that I have a question on is, at the end, towards the end of uh, subsection I, it states unless the tribe finds, after full satisfaction of inter-governmental coordination of public participation provisions of the tribes continuing planning process that allowing lower water quality is necessary. This is the part I have a question on, is it necessary to accommodate important economical or social development in the area in which the waters are located? This may or may not be totally relevant to tonights, uh, public hearing but, my question is how is that going to be determined? Is there going to be a set of criteria, uh, to look at the whole issue of economic and social development in the area, as opposed to the need to protect this particular surface water? Um, is it going to involve a process where the Tribal Council has another public forum for discussion about those issues of economic and social development in the area or what is the intent on having that language on there? I mean I know what the intent of having that language in there but what, what were you, how were you intending to make that determination? Or how were you intending that determination be made?

Ok, the next section I have a question on, is subsection ii, where again, that's towards the end of the subsection it says, it's talking about outstanding resource waters, and it includes a portion of Bad River from downstream confluence with the White River to Lake Superior, etc. and it talks about the watershed, I mean, I'm assuming that, that is the watershed area of the waters that flow into or out of, the surface waters, that is a WQS apply to. And you mentioned I think, in your beginning comments that were submitted by the Watershed Association and is that the Watershed Association that the tribe sponsors?

How active, you know, how active has that been? I know that we had one but I never hear anything about it.

Ok. And I guess just, um, another question or comment that I have, is on the, again, must be the same section E #3 Anti-Degradation implementations, but the, oh no, # 4, I'm sorry, Anti-Degradation Demonstration, or there must be a demonstration submitted to the Water Resources Program, by entities who are seeking to lower the water quality. Subsection 2.A. it says pollution prevention

alternatives analysis, it says that the demonstration has to include; Identification of and pollution prevention alternatives and techniques, that are available to the entity that would eliminate, or significantly reduce the extent to which the increase loading results in the lower water quality. I just have a question, or really what does that mean? What the whole, I mean if we're going to put in a section that might allow economic development, that might lower the water quality, are we going to as part of the process, does this mean that we're requiring whoever wants to, or is involved in some side, some sort of development, that they have to prove, that they're alternatives or techniques to eliminate the impact that they might have on the waters, surface waters? Almost doesn't make a lot of sense to me, we're asking them to apply for a permit to lower the quality, and then we're asking them to identify alternatives and techniques, so that's just a process, right?

And then I need an explanation, again, um.... Subsection 2.B. it talks about, uh, again, that some alternative or enhanced treatment analysis...Identify alternative or enhanced treatment techniques that are available to the entity that would eliminate, again, the same language, eliminate the lowering of water quality, and their costs relative to the cost of treatment necessary to achieve applicable affluent limitations. I need an explanation of really what that means. Are you looking at what it would cost this developer to eliminate the need to lower water quality and then compare that to what? Cost of treatment necessary to achieve, uh, you know it's, I guess there's a fine line there, and I'm not understand what that is... I know that's, uh, compared to, comparing costs but I'm not really clear on what is needed there, or what's being asked there. And then I have questions on subsection 4, again, anti-degradation demonstrations for outstanding Tribal resource waters should include the following: subsection 4.C. it talks of a showing of necessity, you need to identify the project needs, and demonstrate increased loading a necessity. How is that going to be determined? And then going down to subsection 5, anti-degradation decision, itself, subsection I, it talks about, um, if the proposed lowering of WQ is either not necessary, or will not support important social or economic development goals, the Water Resource program, with approval from the Bad River Tribal Council, shall deny the request to lower WQ. Again my question is that the process that's been envisioned? Is that something that the Tribal Council is aware of when they're going to be passing these WQS, that, that's something they're going to be involved with? Do you have recommendations for the Council as for how they are going to actually make that determination or decision? Uh, because I would like if there is, some, I would like to have some discussion at the council level, as far as what that process is going to be about, and I think that there's a need for a public forum, so that people understand, just what's at stake, in that type of decision being made. And then, despite all of this, um, this outline, uh, it says in subsection, that same subsection, there's a sentence towards the end, that says, in no event may the decision reached, under this section, allow WQ to be lowered below the minimum level, required to fully support existing designated uses. So is that just part of the decision? That will be looked at? Fully support existing and designated uses, does that, does that include like for wildlife or fish, plant life, all that, human use or...

But again that's part of the decision making process that they will look at that. Actually say, ok this is, uh, language to this affect that's got to be in any decision made by the council... Do you see what I'm getting at?

Uh, I think, um, the CFR 40=25 is mentioned a number of times through this document, and you might have to have some sort of addendum, that includes that. I could go look it up, but I'm sure a lot of people don't know how to do that. And it's a bid title so I might want to, put the relevant sections in as an addendum, although it's going to lengthen this document, at least you have something to consult I think, I really like subsection 6, narrative criteria, and it's fabulous, you know, knowing this document you ever get to the point your talking about how you're going to measure that or analyze that. I mean, I think it's important, the cultural impacts are very much a part of this full document, but there's no discussion that I could find out about how, what the process is to go through, through analyze whether or not those narrative of, you say you're going to look at them, but there's no... I guess I'd like to see more concrete evidence that actually these are all going to be looked at. Especially in reference to the cultural part. And then in the, further down in that section, subsection 2, its ii, general narrative criteria, you talk about, again, subsection A, pollutants shall not be present in concentrations that may contribute to an adverse human, adverse affect to human, plant, animal, aquatic life, or in quantities that may interfere with the normal propagation growth and survival of indigenous aquatic quota, or however you pronounce that. It say for toxic substances lacking published criteria, minimum criteria or values, shall be calculated by the Tribe, or U.S. EPA, consistent with 40 CFR 132. Uh, why, why do we mention the EPA in here at all? Why don't we just say, no copy EPA and copy what we need to have on the Tribal end, and just say Tribal. Because this is a Tribal document, and it's not an EPA document. And then, subsection B, it says: concentrations of radioactive material should not exceed concentrations cause by naturally occurring elements or materials. Uh... really... I don't know some sort of explanation about that, I mean I know some things are, or do give off some radioactive, but I'd like to have some guarantee that they're not going to, some way to guarantee that, you know, would be measurable. And I'm sure you have that, I'm just saying that, this, this is a little, I think, it leaves too much open for interpretation. Maybe a little bit more clarifying language in there. And then on subsection 7, specific numeric criteria, subsection I, it talks about dissolved oxygen, um, I need an explanation of that, dissolved oxygen it says, towards the end of that paragraph, these criteria will not apply to the Kakagon Sloughs, Bad River Sloughs, and wetlands, due to the natural conditions. What does that mean in reference to these particular areas? Dissolved oxygen says, in that section it starts out, unless otherwise demonstrated through a use attainability analysis, or site specific criteria, that aquatic life cannot be supported, a water body capable of supporting aquatic life shall have a daily minimum dissolve oxygen standard of 5 mg. per liter, is that what that is?

In all cases except where water is designated as a cold water fishery. Blah, blah, blah... though does that mean that Kakagon Sloughs, Bad River Sloughs, are the cool water fishery or what is that? I just need an explanation, it's, you talk about some important areas, Kakagon Sloughs, Bad River Sloughs, and then you're saying it doesn't apply there, I, just maybe a little bit of a blurb.

Kind of, alleviates my concern, why did you mention that there?

And then, subsection 3 or the iii, talks about turbidity, you know I could have looked it up I was lazy and just didn't know, I've heard it before, but maybe a better explanation of what exactly that is. And in that same section, 5.B., you talk about 40 CFR 132, appendix F, procedure 1, again, I know that you're probably trying to save some reading, but in the finished document, you know, you might want to have that attached. And then 8, the analytical methods, the analytical testing methods used to measure or otherwise evaluate compliance with WQS, shall to the extent practicable be in accordance with the most recent additions of the following: Guidelines establishing test procedures for the analysis pollutants, again according to 40 CFR 136, standards methods for examining of water and waste water and other superseding methods published and are approved of EPA, though, where is this, #8, are the measure, how you measure, or how you analyze cultural impacts? For how you measure those, um, those narrative criteria. See what I'm saying there?

You talk about cultural impacts, but you don't say any wherein here, how you're going to measure them or how you're going to assess them or analyze them. And you talk about these narrative criteria but there's nothing in there about how they are going to be measured. I just need an explanation too, when you go to subsection, when you go to section H, numeric water quality, all your little tables and stuff, um, it's hard to follow what the difference is, between the two, in table 2 and table 3, for example: it talks about acute numeric criteria for protection of aquatic life, acute aquatic life criteria that are hardness and pH dependant, maybe just a little more explanation of what all of those tables are all about. I mean, at first, they all look the same to me, until I looked at some of the fine print. And then an explanation of why this human health criteria is in there, like the cancer and non-cancer values. I mean I can guess at it but I'd rather be told why that's in there.

#1 acute chronic ratio, I just quite couldn't get that. And then the chronic toxicity, talk about concurrent and delayed adverse affects and that's pretty self explanatory, but, um, maybe give an example. And then there's another one, the except, and then you talked about two different tiers of water, the surface waters are, um, addressed, I mean, are applied or assigned to the different tiers. A little bit better explanation of the different tiers and which waters are, so I know you have these tables in the back, but it's a little bit difficult for non-science people to put that whole picture back together after you spread it out over 20 pages. I know it is for me, but, I guess, my last comment is that #3 under, in the beginning under A: Background, I think it really does say it all, but the tribe does have a primary interest in protection, control, conservation, and utilization of the Water Resources of Bad River, as exemplified in the treaty, and the constitution, and ultimately recognized by EPA. And the EPA affirmed the tribe's application for program authority in June of '09. And that authority included, or is in addition to, the tribe's historic hunting, fishing, gathering, and use of rectory rights and is in addition to the Tribes Treaty Rights, accordingly these Tribal WQ's shall not be construed to abrogate independent tribal rights, to sufficient quantities and quality of water to support the flora, fauna and cultural traditions of the tribe.

But, the further purpose is to protect public health and welfare, and enhance the quality of water, and serve the purpose. If that is the intent of these proposed standards, then I'm all for them. The council understands what their role is going to be in enforcing these, and have a basic understanding. You said there is just comments tonight, but is there going to be, like a, I assume that there is going to be another audience before the Tribal Council and some discussion of, before you actually present this to them, for adoption.



VIA CERTIFIED MAIL/RETURN RECEIPT REQUESTED

Ms. Naomi Tillison
Bad River Natural Resources Department
P.O. Box 39
Odanah, WI 54861

Re: Comments on proposed water quality standards for the Bad River Band of Lake Superior Chippewa Indians

Dear Ms. Tillison:

Gogebic Taconite LLC ("Gogebic") is currently exploring the feasibility of developing a taconite mining operation on non-reservation land in Ashland and Iron counties that is upstream from the Tribe's reservation. Gogebic's potential mining project has been discussed in local and state newspapers (including the *Ashland Current*, *Ashland Daily Press* and *Ironwood Daily Globe*, *Iron County Miner*) as early as November 2010. In light of the potential for this project to be developed, Gogebic is requesting that the Tribe add Gogebic to its mailing list so it can receive information on relevant future Tribal rulemakings that may impact the potential mining project.

As an initial matter, Gogebic was only made aware of these proposed standards on March 23, 2011, when the Wisconsin Department of Natural Resources brought them to our attention. We are concerned that we did not have time to fully evaluate the proposed standards. Gogebic appreciates the opportunity, however, to submit the following comments and requests for clarification on the proposed water quality standards for the Bad River Band of Lake Superior Chippewa Indians ("Tribe").

1. How does the Tribe envision that the standards would apply to off-reservation activities? We would like clarification regarding how you intend the proposed standards to apply to off-reservation activities or when the Tribe is commenting on Clean Water Act permits that are issued by other federal or state agencies as opposed to when the Tribe is the permitting authority. For example, on page 3 of the proposed standards, the Tribe indicates that it is the Tribe's intent that the standards will be applied to "protect the waters of the Bad River Reservation from *any* impacts regardless of the location of the source of those impacts," which suggests that the Tribe may intend the standards to be broadly applied. (emphasis added) In section E.3.ii, the standards appear to allow for the issuance of permits to entities on the reservation, but they do not address how off-reservation activities would be addressed. In section E.7, the proposed standards indicate that a failure to meet numeric criteria constitutes an enforceable violation. The standards do not contain any information about enforcement and do not explain whether or how the

Tribe intends that enforcement would take place in the absence of the permit being issued by the Tribe.

2. There are several instances where we question whether the proposed standards are consistent with the requirements of the Clean Water Act.
 - a. Our understanding is that the classification of Tribal waters must take into consideration the use and value of the water for a number of uses, including industrial uses. 40 C.F.R. § 131.10(a). The designated uses in the Tribe's proposed standards do not appear to consider the use and value of the water for industrial uses.
 - b. Our understanding is that the Tribe's designated uses must be attainable, which means they can be achieved by the imposition of effluent limits under the Clean Water Act §§ 301(b) and 306 and cost-effective and reasonable best management practices for nonpoint source control. 40 C.F.R. § 131.10(a). It does not appear that there is any demonstration that the uses are attainable in the materials that went out for public comment.
 - c. On page 9 of the proposed standards, in section E.3.i., the standards refer to any "regulated existing or new facility." "Regulated facility" is not defined in the standards, so we cannot determine what potential sources this requirement would apply to.
 - d. The proposed standards include a number of defined terms that are not found in 40 C.F.R. Part 131 or 132 or that differ from EPA's regulations. Gogebic asks the Tribe to ensure that these are consistent with the Clean Water Act. For example:
 - i. Adverse effect. This definition differs from the Clean Water Act in that it replaces "deleterious" with "detrimental" and removes a provision that it does not include non-harmful effects.
 - ii. Change in background. This definition states that "accepted analytical methods" shall be used to measure a change. The proposed standards do not identify what analytical methods are acceptable. In our experience, background sampling can be an expensive process with many stringent requirements to ensure that the samples are not contaminated.
 - e. It appears that proposed antidegradation policy applies to discharges of all pollutants, but 40 C.F.R. part 132, Appendix E, only applies antidegradation to discharges that might result in an increased loading of BCCs. We request clarification on how the Tribe believes that the proposed antidegradation policy is consistent with EPA's regulations.

- f. EPA's regulations include cost-effectiveness as a factor when identifying pollution prevention alternatives and techniques under the antidegradation demonstration. However, it appears that in sections E.4.ii.a, iii.a., and iv.d., the proposed standards remove cost-effectiveness from this demonstration process. We would like the Tribe to clarify why it believes that this is consistent with the Clean Water Act.
 - g. The proposed antidegradation decision for Outstanding Tribal Resource Waters in section E.5.ii states that any request to create new or increased discharges or alterations of the background conditions will result in an automatic denial. An automatic denial of a discharge does not appear to be consistent with Clean Water Act requirements. We would like the Tribe to clarify why it believes that this is consistent with the Clean Water Act.
 - h. A number of the narrative criteria, including those for aesthetic water quality, appear to be impossible for anyone, including upstream dischargers, to meet. Under the Clean Water Act, designated uses need to be attainable. A blanket narrative criteria that is not attainable does not appear to meet this requirement. We would like the Tribe to clarify why it believes that this is consistent with the Clean Water Act.
 - i. In several instances, the proposed narrative criteria appear to regulate water quantity. For example, section 6(ii)(c) on page 14 states that: "Water *quantity* or quality that may limit the growth and propagation of, or otherwise cause or contribute to an adverse effect to wild rice, wildlife, and other flora and fauna of cultural importance to the Tribe shall be prohibited." (emphasis added) Section 6(ii)(e) also appears to regulate water levels. Our understanding is that the Clean Water Act does not directly regulate water quantity, and we are concerned that the proposed standards do not clearly indicate how water quantity is related to water quality.
3. EPA's regulations require that the tribe hold a public hearing in accordance with tribal law and with EPA's public participation regulation (40 C.F.R. part 25). 40 C.F.R. § 131.20(a) – (b). EPA has further stated that it expects that tribes will make every reasonable effort to ensure that possible interested parties are made aware of the hearings on the water quality standards. 56 Fed. Reg. 64892 (Dec. 12, 1991). As part of the public participation process, tribes are required to develop and maintain a list of persons and organizations who have expressed an interest in or may be affected by or have an interest in the development of water quality standards. 40 C.F.R. § 25.4 (b)(5). The public hearing requirements require the notice of each hearing to be well publicized and to be mailed to the appropriate portions of the list of interested and affected parties at least 45 days prior to the date of the hearing. 40 C.F.R. § 25.5(b).

As discussed above, we believe that the Tribe should have identified Gogebic as an interested party and sent Gogebic direct written notice of the proposed regulations. Gogebic only

became aware of the proposed water quality standards late in the afternoon on March 23, 2011, when the Wisconsin Department of Natural Resources' director of the Bureau of Waste and Materials Management brought them to Gogebic's attention. The only other notice that Gogebic is aware of is a notice on the Tribe's website. Due to such late notice, we have not been able to fully evaluate the proposed standards..

In addition, EPA's regulations require that supporting analyses must be made available to the public prior to the hearing. 40 C.F.R. § 131.20(b). We are not aware of any supporting analyses that have been made available to the public, and as such, have not been able to determine the basis for many of the criteria in the proposed standards.

4. Technical and scientific data and analyses.
 - a. It is our understanding that water quality criteria must be based on sound scientific rationale and Clean Water Act § 304(a) guidance or other scientifically defensible methods. 40 C.F.R. § 131.11(a)-(b); § 131.5(a)(4). It appears that the Tribe has proposed several new numerical water criteria, including some in Table 6 and 7. Some of the criteria appear to be more stringent than EPA's criteria. We cannot evaluate the need for these standards or whether the scientific and technical data is appropriate without examining underlying technical data upon which they were based.
 - b. It appears that the Tribe has based some of the criteria on drinking water standards even though the Tribe does not have a public surface water supply use. It is our understanding that the drinking water standards only apply to waters designated as public water supplies (40 C.F.R. § 132.4(c)(3)(i) and (ii)) and that drinking water standards are not needed to protect a use that does not involve the daily ingestion of water.
 - c. It appears that the proposed standards include "natural background" concentrations in a number of its criteria. However, we were not able to find anything in the proposed standards that provides information about what the natural background concentrations are or how they were established.
5. It does not appear that the Tribe has submitted for public comment the methods used and analyses conducted to support its water quality standards or supplemental information about implementation of the standards.
6. On page 24, the Tribe states that when the EPA's final criteria for ammonia are published in the Federal Register, the criteria will immediately take effect in the Tribe's water quality standards. The requirement, however, also includes the proposed criteria and states that the proposed criteria "shall" apply. If the final criteria differ from the proposed criteria, this could create confusion over which applies – the final or the proposed. Gogebic suggests removing the language indicating that the proposed standard shall apply.

Ms. Naomi Tillison
March 28, 2011

Again, Gogebic appreciates the opportunity to submit the above comments and requests clarification on, and revisions to, the proposed water quality standards for the Tribe as indicated above. Please contact me if you have any questions.

Sincerely ,

A handwritten signature in black ink, reading "Timothy J. Myers". The signature is fluid and cursive, with a long horizontal stroke at the end.

Timothy J. Myers
Manager-Engineering

